## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Joseph W. Twarog, Jr. et al.	) .
	) Group Art Unit: NYA
Serial No.: 10/553,932	)
	) Examiner: NYA
Filing Date: 10/20/2005	)
	)
For: ENERGETIC LINEAR TIMING ELEMENT	)

Mail Stop Amendment Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

## **INFORMATION DISCLOSURE STATEMENT** UNDER 37 CFR §§ 1.56, 1.97 AND 1.98

Dear Sir:

In compliance with the duty to disclose, submitted herewith are forms PTO/SB/08a and PTO/SB/08B listing publication(s) of which those persons designated by 37 CFR § 1.56 are believed to be aware. Copies of cited documents other than United States patents and published applications are enclosed.

The filing of this Information Disclosure Statement shall not be construed as a representation that a search has been made, or an admission that the information cited is, or is considered to be, material to patentability.

Respectfully submitted,

CANTOR COLBURN LLP

Victor E. Libert

Registration No. 24,224

Date:

March 9, 2006

Customer No.: 23413

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Substitute for	or form 1449A/P	то		Complete if Known		
				Application Number	10/553,932	
INFOR	RMATION	4 DIS	SCLOSURE	Filing Date	10/20/2005	
STATI	EMENT I	BY A	PPLICANT	First Named Inventor	Joseph W. Twarog, Jr.	
				Art Unit	NYA	
(us	se as many sh	eets as	necessary)	Examiner Name	NYA	
Sheet	1	of	4	Attorney Docket Number	DNI-0024	

			U.S. PA	TENT DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number  Number Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US- 1,964,390	06-26-1934	J. Stuart, 2D	
		US- 2,416,639	02-25-1947	David E. Pearsall	
		US- 2,963,971	12-13-1960	C. F. Home	
		US- 3,027,839	04-03-1962	A. J. Grandy et al.	
		US- 3,590,739	07-06-1971	Per-Anders Persson	
		US- 3,730,096	05-01-1973	Josef Prior	
		US- 4,220,087	09-02-1980	Posson	
		US- 4,244,900	01-13-1981	Heider	
		US- 4,288,262	09-08-1981	Flanagan et al.	
		US- 4,290,366	09-22-1981	Janoski	
		US- 4,328,753	05-11-1982	Kristensen et al.	
		US- 4,402,270	09-06-1983	McCaffrey	
		US- 4,493,261	01-15-1985	Simon et al.	
		US- 4,607,573	08-26-1986	Thureson et al.	
		US- 4,660,474	04-28-1987	Dias dos Santos	
		US- 4,699,059	10-13-1987	Kelly et al.	
		US- 4,756,250	07-12-1988	Dias dos Santos	
		US- 4,757,764	07-19-1988	Thureson et al.	
		US- 4,817,673	04-04-1989	Zoghby et al.	
		US- 4,838,165	06-13-1989	Gladden et al.	

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				FOR	EIGN PATENT DO	CUMENTS		
Evaminar	Cite		Foreign Patent Do	cument	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant	
	No.1	Office <sup>3</sup>	Number4	Kind <sup>6</sup> (if known)	MM-DD-YYYY	Applicant of Cited Document	Passages or Relevant Figures Appear	Τ <sup>6</sup>
		wo	01/08937 A1		02-08-2001	Autoliv Development AB		
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Examiner	Date	
Signature	Consider	red

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. See Finds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. See Finds Codes of USPTO Patent Documents, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Skind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Substitu	ute for form 1449A/	PTO		Complete if Known			
				Application Number	10/553,932		
INF	ORMATIO	N DIS	CLOSURE	Filing Date	10/20/2005		
STA	TEMENT	BY A	PPLICANT	First Named Inventor	Joseph W. Twarog, Jr.		
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	(use as many s	sheets as r	ecessary)	Examiner Name	NYA		
Sheet	2	of	4	Attorney Docket Number	DNI-0024		

			U.S. PAT	ENT DOCUMENTS	
Examiner Initials	Cite No.1	Document Number  2 Number Kind Code (ff known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US- 4,841,856	06-27-1989	Gisler et al.	• •
		US- 5,001,981	03-26-1991	Shaw	
		US- 5,009,163	04-23-1991	Robins et al.	
		US- 5,010,821	04-30-1991	Blain	
		US- 5,048,420	09-17-1991	Beck et al.	
		US- 5,101,729	04-07-1992	Noble et al.	
		US- 5,166,470	11-24-1992	Stewart	
		US- 5,208,419	05-04-1993	Greenhorn et al.	
		US- 5,212,341	05-18-1993	Osborne et al.	
		US- 5,243,913	09-14-1993	Brent et al.	
		US- 5,316,600	05-31-1994	Chan et al.	
		US- 5,317,974	06-07-1994	Stewart et al.	
		US- 5,351,618	10-04-1994	Brent et al.	
		US- 5,383,405	01-24-1995	Blain	
		US- 5,431,100	07-11-1995	Snyder	
		US- 5,435,249	07-25-1995	Brent et al.	
		US- 5,473,987	12-12-1995	Beck	
		US- 5,507,891	04-16-1996	Zeigler	
		US- 5,509,355	04-23-1996	Stewart et al.	
	-	US- 5,518,807	05-21-1996	Chan et al.	

	FOREIGN PATENT DOCUMENTS													
E.u.	Cite		oreign Patent Do	cument	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant							
Examiner Initials	No.1	Office <sup>3</sup>	Number <sup>4</sup>	Kind <sup>6</sup> (if known)	MM-DD-YYYY	Applicant of Cited Document	Passages or Relevant Figures Appear	Τ <sup>6</sup>						
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Examiner	Date	
Signature	Considered	

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Substitu	ite for form 1449A	/PTO		Complete if Known			
				Application Number	10/553,932		
INF	DRMATIC	N DIS	CLOSURE	Filing Date	10/20/2005		
STA	TEMENT	BY A	PPLICANT	First Named Inventor	Joseph W. Twarog, Jr.		
				Art Unit	NYA		
	(use as many	sheets as	necessary)	Examiner Name	NYA		
Sheet	3	of	4	Attorney Docket Number	DNI-0024		

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		US- 5,597,973	01-28-1997	Gladden et al.	
		US- 5,616,883	04-01-1997	Hamilton et al.	
		US- 5,625,162	04-29-1997	Appleby	
		US- 5,629,493	05-13-1997	Andersson et al.	
		US- 5,681,904	10-28-1997	Manzara	
		US- 5,827,994	10-27-1998	Gladden et al.	
		US- 5,837,924	11-17-1998	Austin	
		US- 5,844,322	12-01-1998	Andersson et al.	
		US- 5,945,627	08-31-1999	Arpin et al.	
		US- 6,006,671	12-28-1999	Yunan	
		US- 6,170,398	01-09-2001	Rabotinsky et al.	
		US- 6,347,566	02-19-2002	Rabotinsky et al.	
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	FOREIGN PATENT DOCUMENTS													
r	Cita	Fo	oreign Patent	Docum	nent	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant						
Examiner Initials*	Cite No. <sup>1</sup>	Office <sup>3</sup>	Number <sup>4</sup>	ر	Kind <sup>6</sup> (if known)	MM-DD-YYYY Applicant of Cited Document Passages or Relevant Figures Appear	T <sup>6</sup>							
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Substitute	e for form 1449B.	/PTO		Co	mplete if Known	
				Application Number	10/553,932	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT			CLOSURE	Filing Date	10/20/2005	
			PLICANT	First Named Inventor	Joseph W. Twarog, Jr.	
STATEMENT DI ALL LIOANT				Art Unit	NYA	
(use as many sheets as necessary)			necessary)	Examiner Name	NYA	
Sheet	4	of	4	Attorney Docket Number	DNI-0024	

OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS							
Examiner Initials*	Cite No.1						
		Sartomer Product Bulletin: SR-238, 1,6 Hexanediol Diacrylate, 2027 R. 12/98					
		Anthony P. Manzara, 3M Specialty Chemicals Division, "A New Cure System For Azido Polymers", Approved for public release April 1996, 8 pages.					
		http://www.chemicalland21.com/arokorhi/specialtychem/perchem/N-BUTYRYL%20CHL, 4/15/2004, N-BUTYRYL CHLORIDE (BUTANOYL CHLORIDE), "n-BUTYRYL CHLORIDE", 2 pages.					
		http://search.chemexper.com/_KFPNKUMHFTNBQNKQNQNMPOLQOE_?for=ccd&sea 4/15/2004, Poly(vinyl butyral), I page					
		Rob Hunter and Tony Manzara, 3M Performance Materials,"Interaction of Glycidyl Azide Polymer Plasticizer With Other Polymers", 8 pages, facsimile-transmitted April 26, 2002.					
		3M Industrial Products Division, "technical data Glycidyl Azide Polymer Polyol L-12369 (Experimental), issued December, 1991, 2 pages.					
		3M Industrial Products Division, "technical data Glycidyl Azide Polymer Polyol L-12616 (Experimental), issued April, 1992, 2 pages.					
Examine	 r	Date	=				
Signature		Considered					

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not

<sup>&</sup>lt;sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.